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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/505,678	02/17/2000	Lawrence Stallman	2135.650	7646

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EXAMINER	
SAADAT, CAMERON	
ART UNIT	PAPER NUMBER
3713	15

DATE MAILED: 04/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/505,678	STALLMAN ET AL.	
	Examiner	Art Unit	
	Cameron Saadat	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *39-46 and 49-51* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *39-46 and 49-51* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

In response to Amendment filed 3/4/03, claims 39-46 and 49-51 are pending in this application. Claims 47-48 have been cancelled.

Applicant's request for reconsideration, in light of the declaration submitted under 37 C.F.R 1.131 with respect to claims 39-46 and 49-51 has been fully considered. The final rejection mailed December 18, 2002 is hereby withdrawn in favor of the following non-final action. The extended prosecution of this application is respectfully regretted.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 39, 41, 43, 49-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross et al. (U.S. Patent No. 5,864,481) in view of Leiper (USPN 6,128,002).

Regarding claim 39, Gross et al. discloses a portable, wearable, information apparatus for collecting, coordinating, and communicating information, said system being capable of

providing real-time situational awareness in armed conflict conditions, said system comprising: a power supply (column 6, lines 53-57); a computer 200 for controlling functions of the apparatus; a software interface 300 for interacting with the computer; a display for displaying information processed by the computer (column 1 line 46); a weapon communicable connected to the computer(column 7, lines 8-12), and having a trigger for firing the weapon; the weapon having a grip for handling the weapon, said grip located adjacent the trigger; the weapon having a barrel including a bore, said bore having an axis extending longitudinally therethrough (see Fig. 5); wherein the software interface is controlled by weapon mounted cursor control device 250 for positioning a cursor (column 5, line 51) and an actuating mechanism for performing control, selection, and action functions on the software interface (column 5, lines 55-58).

Gross et al. further teaches computer control pad 550 located directly on the weapon proximal to the portion of the grip, mounted for access while maintaining the user's hand in the firing position (column 7, lines 50-56). It is not explicitly disclosed that the computer control pad is located on a rear facing portion of the grip such that a right and left handed user can access the control pad employing a thumb. However, Leiper discloses a pistol grip controller 20 comprising a trigger 42 for manipulation by a fore finger of a user while a thumb may be employed to manipulate joystick 46 and 48 which are located on a back surface 26 of the grip (see Col. 4, line 60 – Col. 5, line 18; Col. 5, lines 37-45). Thus, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the control mechanism described in Gross et al., by providing a control mechanism located on a rear facing portion of the grip such that the control mechanism can be accessed by employing a thumb, in light of the teachings of Leiper in order to allow a user to depress the trigger while manipulating the

controller with the thumb (Leiper, Col. 5, lines 13-20), thereby allowing the user to adjust controls and use features of the weapon without removing the hand from the firing position (Gross et al., column 7, lines 52-56).

Regarding claim 41, Gross et al. discloses an apparatus further comprising a software interface comprising at least one pull-down menu (column 5, line 57) containing words being alternately descriptive of combat scenarios and directives (column 12, line 61); a message window for receiving and displaying words selected from the pull-down menu; and a means for selectively transmitting a message contained in the message window (column 12, lines 62-65).

Regarding claim 43, Gross et al. discloses a portable, wearable, information apparatus for collecting, coordinating, and communicating information, said system being capable of providing real-time situational awareness in armed conflict conditions, said system comprising: an input/output device for interfacing the computer with components of the system (column 2, lines 64-65), wherein the input/output device comprises voltage converters 244, data relays, and plug-in/plug-out connectors for providing means for quickly removing and exchanging components (column 1, lines 60-64; column 3, lines 22-30); a display for displaying information processed by the computer (column 1 line 46); a voiceless, wireless communication means (column 12, lines 62-63); a user position location device 245; a power supply (column 6, lines 53-57); a computer 200 for controlling functions of the apparatus; a software interface 300 for interacting with the computer; a weapon communicable connected to the computer(column 7, lines 8-12), and having a trigger for firing the weapon; the weapon having a grip for handling the weapon, said grip located adjacent the trigger; the weapon having a barrel including a bore, said bore having an axis extending longitudinally therethrough (see Fig. 5); wherein the software

interface is controlled by weapon mounted cursor control device 250 for positioning a cursor (column 5, line 51) and an actuating mechanism for performing control, selection, and action functions on the software interface (column 5, lines 55-58). Gross et al. further teaches computer control pad 550, located directly on the weapon on a rear facing portion of the grip, mounted for access by users while maintaining the user's hand in the firing position (column 7, lines 50-56). It is not explicitly disclosed that the computer control pad is located on a rear facing portion of the grip such that a right and left handed user can access the control pad employing a thumb. However, Leiper discloses a pistol grip controller 20 comprising a trigger 42 for manipulation by a fore finger of a user while a thumb may be employed to manipulate joystick 46 and 48 which are located on a back surface 26 of the grip (see Col. 4, line 60 – Col. 5, line 18; Col. 5, lines 37-45). Thus, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the control mechanism described in Gross et al., by providing a control mechanism located on a rear facing portion of the grip such that the control mechanism can be accessed by employing a thumb, in light of the teachings of Leiper in order to allow a user to depress the trigger while manipulating the controller with the thumb (Leiper, Col. 5, lines 13-20), thereby allowing the user to adjust controls and use features of the weapon without removing the hand from the firing position (Gross et al., column 7, lines 52-56).

Regarding claim 49, Gross et al. discloses an apparatus wherein words which are contained in the pull-down menu may be input by a user (column 12, line 64).

Regarding claim 50, Gross et al. discloses an apparatus wherein the input/output device, but does not explicitly disclose a digital/analog data converting means. However, it is the examiner's position the use of digital/analog data converting means is notoriously old and well

known for converting digital pulses into analog signals so that the signal can be used by an analog device, such as the speaker disclosed by Gross et al. (column 9, line 9). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the input/output device described by Gross et al., by providing a digital/analog converting means, for converting digital pulses into analog signals so that the signal can be used by an analog device, such as a speaker.

Regarding claim 51, Gross et al. discloses an apparatus wherein the input/output device further includes video format converting means (column 5, line 64).

4. Claims 40, 42 and 44-46, are rejected under 35 U.S.C. 103(a) as being unpatentable over Gross et al. (U.S. Patent No. 5,864,481) in view of Leiper (USPN 6,128,002)., further in view of Magid et al. (U.S. Patent No. 5,764,873).

Regarding claims 40 and 44, Gross et al. discloses a software interface 300, comprising a graphical icon-based user interface (column 12, line 50), embodied in a computer readable medium communicably connected to a weapon mounted cursor control device. Gross et al. does not explicitly disclose a specific click-and-carry method of cursor control. However, Magid et al. discloses a click-and-carry method of cursor control comprising in sequence: orienting a cursor at a first location proximal a graphical icon displayed; depressing an actuating mechanism to select the graphical icon (column 8, line 25); releasing the actuating mechanism (column 8, lines 31-32); orienting the cursor at a second location physically separate from the first location; depressing the actuating mechanism to release the graphical icon at the second location (column 9, lines 11-12). At the time of the invention, it would have been obvious to a person of ordinary skill in the art to modify the user interface described in the combination of Gross et al., by

providing a modified click-and-carry method of cursor control, in light of the teachings of Magid et al., in order to allow a user to move icons without requiring the user to hold a button, actively depressed during the move (see Magid et al., column 8, lines 7-14).

Regarding claim 45, Gross et al. discloses an apparatus further comprising a software interface comprising at least one pull-down menu (column 5, line 57) containing words being alternately descriptive of combat scenarios and directives (column 12, line 61); a message window for receiving and displaying words selected from the pull-down menu; means for selectively transmitting a message contained in the message window (column 12, lines 62-65).

Regarding claims 42 and 46, Leiper further discloses that the control mechanism is a joystick (Col. 5, lines 37-45).

Response to Arguments

5. Applicant's arguments with respect to claims 39-46 and 49-51 have been fully considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Ozaki (Japanese Patent Application 10-130862) – discloses a weapon controller comprising a trigger and control pad on the rear portion of the weapon grip.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cameron Saadat whose telephone number is 703-305-5490. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin Wallace can be reached on 703-308-4119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

CS
April 9, 2003

V. Martin-Wallace

VALENCIA MARTIN-WALLACE
SUPERVISORY PATENT EXAMINER
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